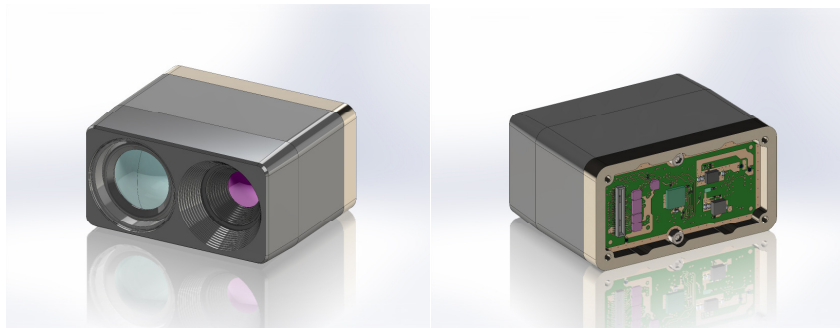


# Hadron summary datasheet

Hadron is a dual camera IR+EO core payload intended to be mounted on a small UAS gimbal. There are separate interfaces to the two cameras: the EO camera has raw 4-lane MIPI interface and the IR camera has USB 3.0 interface. Hadron also has a built in IMU for gimbal stabilization. Video processing (compression, recording etc.) is performed outside the Hadron.



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Part number	70320A034-6C12080
Size	24 x 45 x 36 mm
Weight	42.8g
Power	5V supply voltage. Typical power dissipation < 1300mW, Max < 2820mW
Mechanical interface	Screw mount to back plate
Electrical interface	Hadron connector: Hirose DF40C-50DP-0.4V(51) Example of mating connector: DF40HC(2.5)-50DS-0.4V(51)
IR camera sensor	Boson 320x256 pixels, 12µm pitch, USB video and CCI
IR camera optics	EFL 6.3mm, 34° HFOV, F/# 1.0
IR camera video	Full resolution @ 60Hz or 30Hz
EO camera sensor	Sony IMX412, 4056x3040 pixels, 1.55µm pitch, 4-lane MIPI
EO camera optics	Sunny SYD1201A, EFL 3.7mm, 80° HFOV, F/# 2.8
EO camera video	Full resolution @ 60Hz See IMX412 datasheet for more options
IMU	ICM20602, I2C or SPI (selectable)
Operational and storage temperature	-20°C to +60°C
Tested EMI performance	FCC part 15 Class B
Environmental sealing	IP53 (with the rear interfaces sealed)

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